

WORT PRODUCTION OPTIMISATION BASED ON PHYSICO-CHEMICAL MALT PARAMETERS

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ABSTRACT

The quality of the beers is directly related to the quality of wort produced in brewing. Raw material used for the production of beer is malt, barley seed partially sprouted, previously heated and dried. To optimize the wort production is necessary to monitor the physical and chemical parameters of the malt. Malt has direct impact on flavor (taste, aroma, sensation in the mouth), surface, (color, clarity, foam), colloidal stability and stabilization of oxidative flavor. Physical characteristics of malt are very important and affect the technological process of brewing. The most important parameter is malt extract. Wort composition depends on the quality and type of raw materials used, in the control of the various processing steps and on the concentration and profile of nitrogen compounds (proteins, polypeptides and amino acids). The quality and stability of beer depend on its protein content. In this paper are presented the results of physical and chemical analyses performed on samples of malt also is studied the impact of these results in the quality of wort. This study gives the results of protein content in wort, at different stages. Stability and life expectancy of beer is studied depending on protein content. The parameters studied in this paper are friability, extract content, malt moisture and enzymatic content in wort at various stages of production, Hartong index, viscosity, and filterability.

Keywords: Extract, friability, malt, nitrogen compounds, physical analyse, wort.